

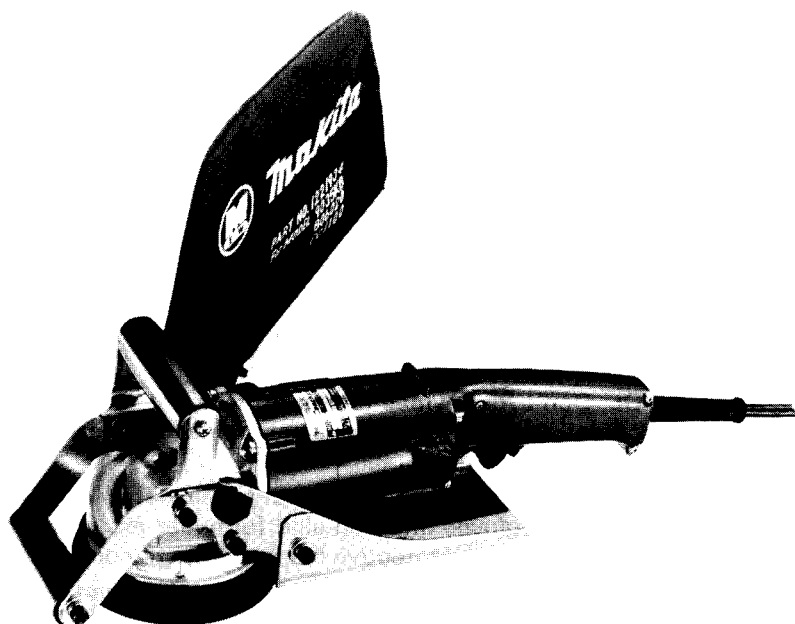
# Makita

アメリカ

## Concrete Planer

MODEL PC1100

### INSTRUCTION MANUAL



#### Specifications

Wheel diameter	Hole diameter	Continuous rating		No load speed	Overall length	Net weight	Power supply cord
		Input	Output				
110 mm (4-3/8")	15 mm (5/8")	1,020 W	680 W	10,000 R/min.	418 mm (16-1/2")	4.3 kg (9.5 lbs)	2.5 m (8.2 ft.)

- Manufacturer reserves the right to change specifications of parts and accessories without notice.
- Note: Specifications of parts and accessories may vary from country to country.

# **IMPORTANT SAFETY INSTRUCTIONS**

## **(For All Tools)**

**WARNING: WHEN USING ELECTRIC TOOLS, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, AND PERSONAL INJURY, INCLUDING THE FOLLOWING:**

### **READ ALL INSTRUCTIONS.**

1. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite injuries.
2. **CONSIDER WORK AREA ENVIRONMENT.** Don't use power tools in damp or wet locations. Keep work area well lit. Don't expose power tools to rain. Don't use tool in presence of flammable liquids or gases.
3. **KEEP CHILDREN AWAY.** All visitors should be kept away from work area. Don't let visitors contact tool or extension cord.
4. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, and high or locked-up place — out of reach of children.
5. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
6. **USE RIGHT TOOL.** Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended; for example, don't use circular saw for cutting tree limbs or logs.
7. **DRESS PROPERLY.** Don't wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
8. **USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty.
9. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
10. **SECURE WORK.** Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
11. **DON'T OVERREACH.** Keep proper footing and balance at all times.
12. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.
13. **DISCONNECT TOOLS.** When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.

14. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
15. **AVOID UNINTENTIONAL STARTING.** Don't carry tool with finger on switch. Be sure switch is OFF when plugging in.
16. **EXTENSION CORDS.** Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

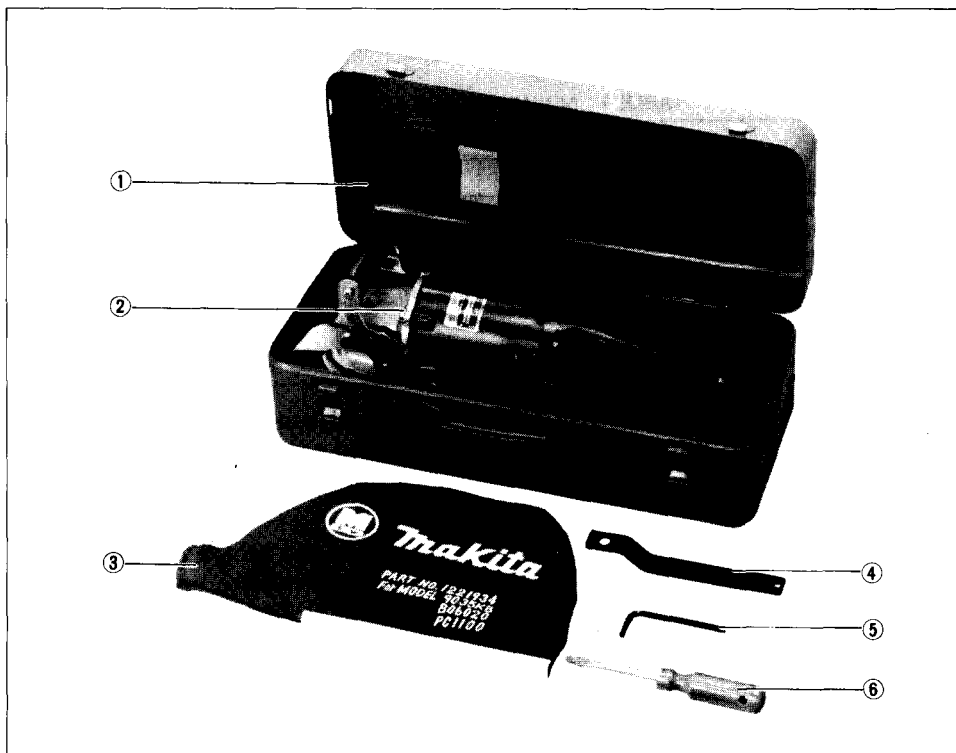
**TABLE 1 MINIMUM GAGE FOR CORD SETS**

			Total Length of Cord in Feet			
			0 — 25	26 — 50	51 — 100	101 — 150
Ampere Rating More Than	—	Not More Than	A W G			
0	—	6	18	16	16	14
6	—	10	18	16	14	12
10	—	12	16	16	14	12
12	—	16	14	12	Not Recommended	

17. **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
18. **STAY ALERT.** Watch what you are doing, use common sense. Don't operate tool when you are tired.
19. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service center. Don't use tool if switch does not turn it on and off.
20. **GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example; pipes, radiators, ranges, refrigerator enclosures.
21. **REPLACEMENT PARTS.** When servicing, use only identical replacement parts.
22. **POLARIZED PLUGS.** To reduce the risk of electric shock, this equipment has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

**VOLTAGE WARNING:** Before connecting the tool to a power source (receptacle, outlet, etc.) be sure the voltage supplied is the same as that specified on the nameplate of the tool. A power source with voltage greater than that specified for the tool can result in **SERIOUS INJURY** to the user — as well as damage to the tool. If in doubt, **DO NOT PLUG IN THE TOOL**. Using a power source with voltage less than the nameplate rating is harmful to the motor.

### Concrete Planer & Standard Equipment



- ① Steel carrying case
- ② Tool body
- ③ Dust bag
- ④ Lock nut wrench
- ⑤ Hex wrench
- ⑥ (-) Screwdriver

## Cautions:

### Do not bear down on tool

Work the tool away from and toward you without bearing down on it. Otherwise, the planer will leave marks on the surface, the motor speed will drop and suction efficiency will decrease.

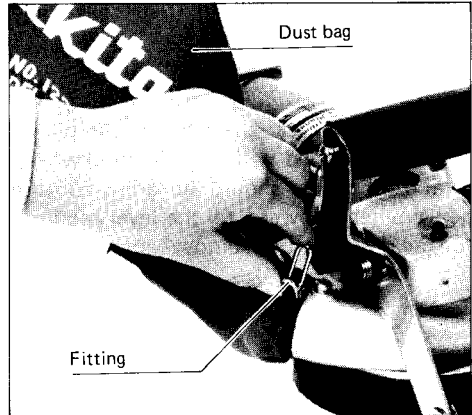
### Do not use water/coolant

A dry-type diamond wheel is used, so no coolant is used. If water gets into the tool, a breakdown result.

### Dust bag installation

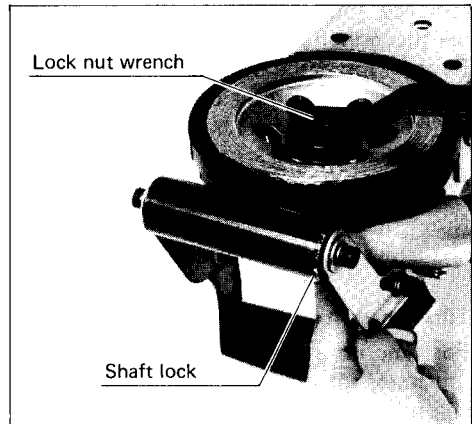
To install dust bag, press bag fitting to inside, open mouth of bag and slip onto dust port.

Remove dust bag when it begins to touch cutting surface. This is a sign that it is full. Failure to empty bag will lead to poor suction/pickup.



### How to replace diamond wheel

To replace a worn diamond wheel with a new one, press in the shaft lock to hold the shaft steady, then loosen the lock nut to the left with the lock nut wrench provided.

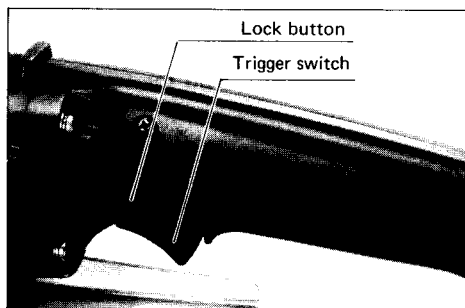


**Note:** The ordinary diamond wheels on the market have no exhaust holes, so dust evacuation is poor. Also, if the installing hole is not of the exact diameter, tool vibration occurs and accidents can occur. ALWAYS USE A MAKITA OFFSET DIAMOND WHEEL.

## How to use

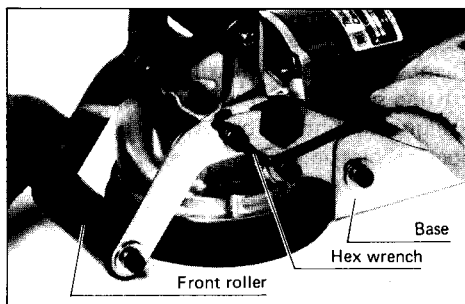
### Switch action

To start the tool, simply pull the trigger. Release the trigger to stop. Model with a lock button on the handle may be run continuously without keeping your finger on the trigger. To lock the trigger in the ON position first pull the trigger and then depress the lock button on the handle with your thumb. To stop the tool from the lock position, just pull the trigger again and release it.



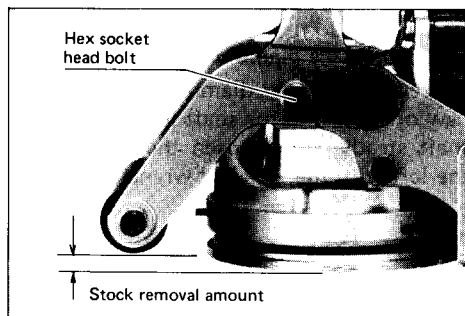
### Level planing

To level a surface, the base of the planer should be aligned with the diamond wheel. The front roller should be adjusted (use hex wrench) upward to the level required for the desired stock removal amount.



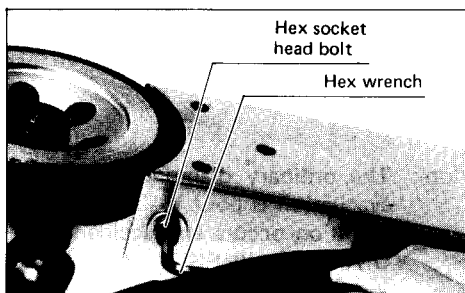
To change the amount of stock (concrete) removed, loosen the hex socket head bolts on the grip holder with the hex wrench. Raise or lower the front roller to adjust the gap between it and the diamond wheel. The difference is the stock removal amount. Then secure the hex socket head bolts very carefully.

Note: Maximum stock removal should be less than 2.5 mm (3/32").



### Tilting base for smoother planing

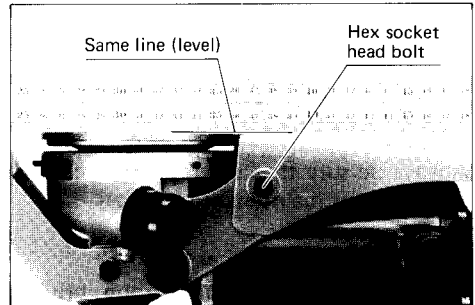
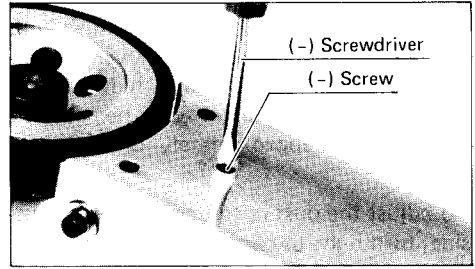
For smooth removal of a given surface roughness or texture, tilting the base is helpful. Use the hex wrench to loosen the two hex socket head bolts securing the base on either side.



Use a (-) screwdriver to lower the three (-) screws by turning rightward (-) screws on the base (see right).

Use a square or ruler to obtain the desired base angle in relation to the diamond wheel. Then secure carefully the hex socket head bolts on either side of the base. Adjust center of base near wheel so that it is on the same level as the wheel.

Note: After base adjustment, turn 3 (-) screws leftward on base until the heads are flush with the back side of the base. Turn gently or base adjustment will be thrown off.



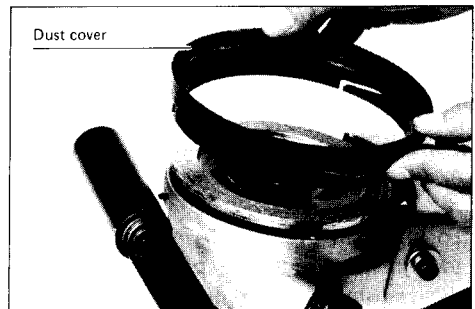
#### **Base adjustment to compensate for wheel wear**

With long use, the diamond wheel will wear and thus create a gap with the planing surface so that performance becomes poor. Check the tool after every 4 or 5 hours of use. If the wheel and base surfaces are not alignend, loosen the hex socket head bolts securing the base. Turn the (-) screws on the base to the right and adjust the base so as to be level with the wheel surface. Retighten the bolts and then gently ease the (-) screws to the left until flush with the back side of the base. The screws should not come loose during operation.

#### **Planing in corners**

Flush planing of corners is possible after first removing the dust cover.

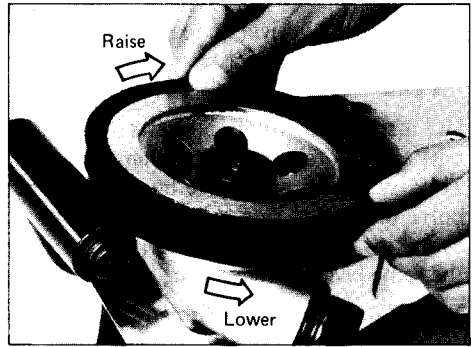
Turn dust cover rightward until it stops, light toward you to remove.



### Dust cover adjustment

The dust cover should be either flush with the diamond wheel surface or very slightly above (when tool is inverted) 0.5 mm (.020"). Suction/pickup will be poor if they are not approximately on the same level.

To adjust the dust cover, grip it on the outside; turn right to raise, left to lower.



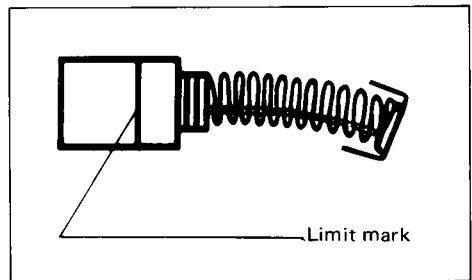
## MAINTENANCE

### CAUTION:

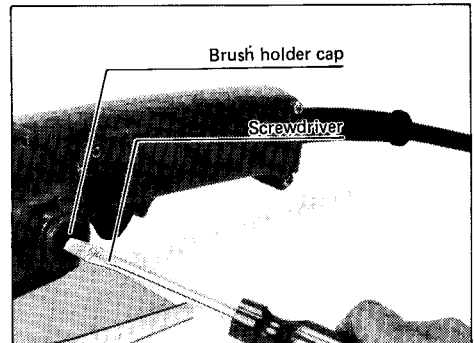
Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

### Replacing carbon brushes

Remove and check the carbon brushes regularly. Replace when they wear down to the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.



Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.



To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.



# ACCESSORIES

**CAUTION:**

These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. The accessories or attachments should be used only in the proper and intended manner.

**Offset diamond wheel (Dry type)**



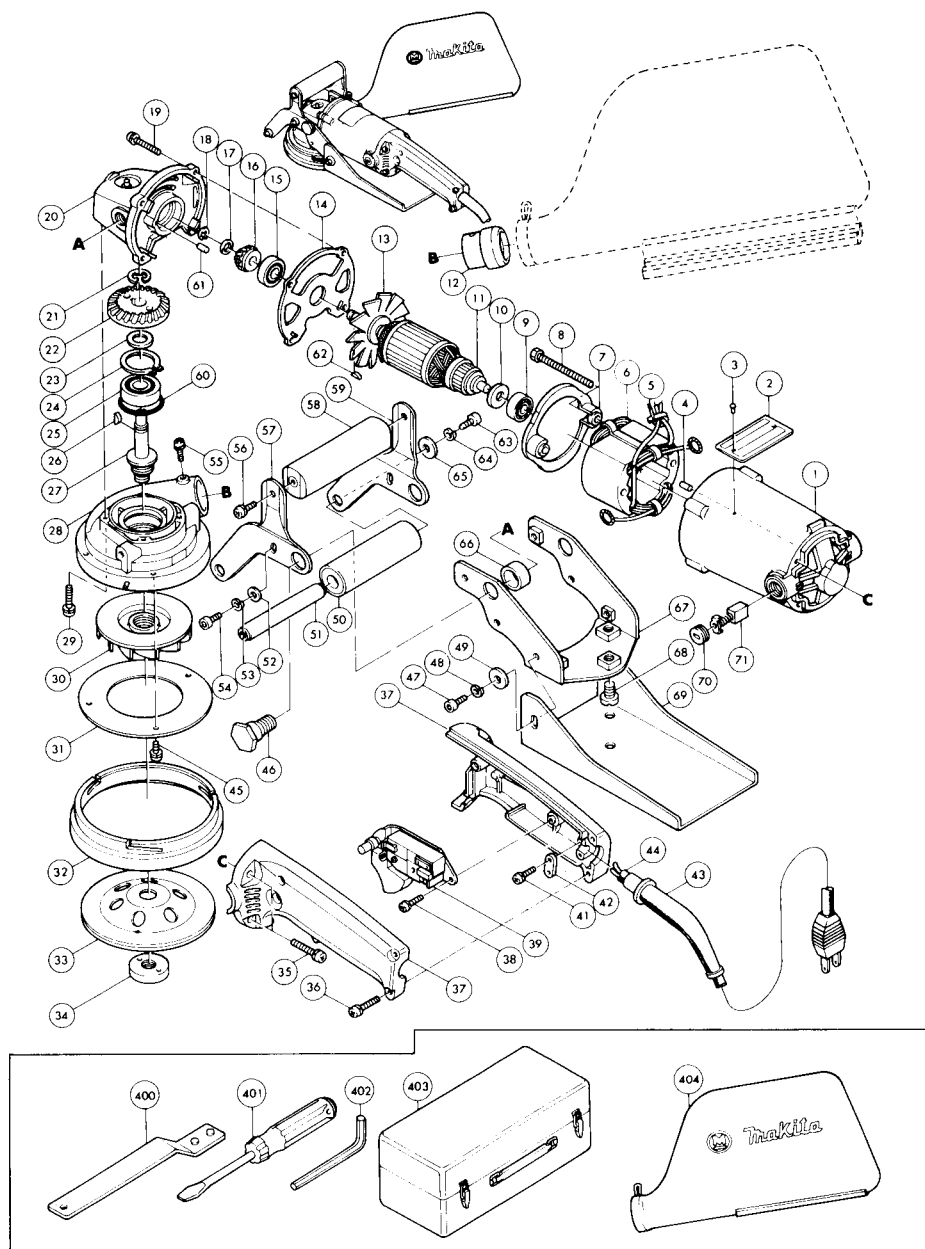
(Note)

- The planing efficiency and the service life of the offset diamond wheel are affected by the condition of the materials to be planed. In particular, planing "green" or uncured concrete, or mortar can shorten the service life of the diamond wheel.

Diameter	Hole diameter	Part No.	Application
110 mm (4-3/8")	15 mm (5/8")	724906-5	For concrete

- If the cutting action of the diamond wheel begins to diminish, an old discarded coarse grit bench grinder wheel can be used to dress the diamond wheel. Tightly secure the bench grinder wheel and apply the planer to it.

# 110mm (4 $\frac{3}{8}$ " ) CONCRETE PLANER Model PC1100



ITEM NO.	NO. USED	DESCRIPTION	ITEM NO.	NO. USED	DESCRIPTION
<u>MACHINE</u>			<u>MACHINE</u>		
		MOTOR HOUSING ASSEMBLY (Assembled Items 1 & 4)	37	1	Handle Set
1	1	Motor Housing (With Brush Holder x 2)	38	1	P. H. Screw M4x6 (With Washer)
2	1	Name Plate	39	1	Single Pole Switch (With Lock Button) NPAHR2-35S
3	2	Rivet 0-5	41	2	P. H. Screw M4x18 (With Washer)
4	1	Rubber Pin 4	42	1	Strain Relief
5	1	Band	43	1	Cord Guard
6	1	FIELD ASSEMBLY (With Garter Spring x 2)	44	1	CORD ASSEMBLY (Assembled Cord, Plug & Cord Guard)
7	1	Baffle Plate	45	3	P. H. Screw M4x10 (With Washer)
8	2	H. Bolt M5x65 (With Washer)	46	2	H. Bolt M12
9	1	Ball Bearing 608LB	47	2	H. S. H. Bolt M6x12
10	1	Insulation Washer	48	2	S. Washer 6
11	1	ARMATURE ASSEMBLY (Assembled Items 9 - 11 & 13)	49	2	F. Washer 6
12	1	Joint	50	1	Front Roller (With Ring 12 x 2)
13	1	Fan 70	51	1	Front Roller Shaft
14	1	Plate	52	2	F. Washer 6
15	1	Ball Bearing 6000LLB	53	2	S. Washer 6
16	1	Spiral Bevel Gear 13	54	2	H. S. H. Bolt M6x12
17	1	F. Washer 8	55	1	P. H. Screw M5x8 (With Washer)
18	1	Retaining Ring S-8	56	2	P. H. Screw M5x12 (With Washer)
19	4	P. H. Screw M5x25 (With Washer)	57	1	Grip Holder (L)
		GEAR HOUSING ASSEMBLY (Assembled Items 20 & 61)	58	1	Grip 25
20	1	Gear Housing (With Needle Bearing 810, Compression Spring 6 & Pin 5)	59	1	Grip Holder (R)
21	1	Retaining Ring S-12	60	1	O Ring 32
22	1	Spiral Bevel Gear 34	61	1	Rubber Pin 4
23	1	Ring 12	62	1	Woodruff Key 3
24	1	Retaining Ring R-32	63	2	H. S. H. Bolt M6x12
25	1	Ball Bearing 6201DDU	64	2	S. Washer 6
26	1	Woodruff Key 3	65	2	F. Washer 6
27	1	Spindle	66	2	Sleeve 16
28	1	Gear Housing Cover	67	1	Base Holder
29	4	P. H. Screw M4x22 (With Washer)	68	3	(-) Screw M8x12
30	1	Fan 76	69	1	Base
31	1	Separator	70	2	Brush Holder Cap
32	1	Dust Cover	71	1	Carbon Brush Set CB-101
33	1	Offset Diamond Wheel 110	<u>ACCESSORIES</u>		
34	1	Lock Nut 12-30	400	1	Lock Nut Wrench 20
35	4	P. H. Screw M5x28 (With Washer)	401	1	(-) Screwdriver 6
36	3	P. H. Screw M4x22 (With Washer)	402	1	H. Wrench 5
			403	1	Steel Case
			404	1	Dust Bag

## MAKITA LIMITED ONE YEAR WARRANTY

### Warranty Policy

Every Makita tool is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects from workmanship and materials for the period of ONE YEAR from the date of original purchase. Should any trouble develop during this one-year period, return the COMPLETE tool, freight prepaid, to one of Makita's Factory or Authorized Service Centers. If inspection shows the trouble is caused by defective workmanship or material, Makita will repair (or at our option, replace) without charge.

This Warranty does not apply where:

- repairs have been made or attempted by others;
- repairs are required because of normal wear and tear;
- The tool has been abused, misused or improperly maintained;
- alterations have been made to the tool.

IN NO EVENT SHALL MAKITA BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

MAKITA DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND "FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE-YEAR TERM OF THIS WARRANTY.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

## Makita Corporation

3-11-8, Sumiyoshi-cho,  
Anjo, Aichi 446 Japan

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